Ke Kulanui Kaiāulu o ke Koʻolau

# IS 130: CSI Hawaii

# An Introduction to the Scientific Process Using Forensic Science

3 credits (CRN 64398) MW: 11:30-12:45 Imiloa 133 M: 1:00-2:20 PM Imiloa 133

# Windward Community College Mission Statement

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai'i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide the Ko'olau region of O'ahu and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

### Instructor Information

### Ross Langston, PhD

Office: Imiloa 115. Cell Phone: 808-429-6218. Office Phone: 808-236-9119

Office Hours: W: 12:45-2:30 PM Tr & F: 11:30-2:30 and by appointment

Email: langston@hawaii.edu

ZOOM: https://hawaii.zoom.us/my/rosswcc

### **Alternate Contact Information**

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

Location: Alaka'i 121Phone: (808) 235-7422

### Course Information

### **Catalog Description**

This is an interdisciplinary science course that uses forensic science to teach students about the scientific process. It draws chiefly upon biology but also incorporates elements of chemistry, mathematics, and physics. Topics covered include the biology of mammals (including humans), anatomy and physiology of select body systems, types of forensic evidence, latent fingerprints, blood typing, blood spatter analysis, osteology, hair and fiber analysis, fluorescence of bodily fluids, and ballistics. This is a non-majors class intended for students interested in forensic science and who wish to satisfy DB and DY requirements for the AA degree. It is not intended for forensic science majors.

## Activities Required at Scheduled Times Other than Class Times

None.

### **Student Learning Outcomes**

As a result of taking this course, students can expect to attain the following outcomes:

- 1. Explain the anatomy and function of select body systems (e.g., integumentary, skeletal, and cardiovascular)
- 2. Describe the various types of physical and biological evidence used in forensic science and discuss their uses and limitations.
- 3. Use the scientific method to analyze and interpret forensic data, identify a suspect, and describe the modus operandi.

### **Required Materials**

#### Textbooks:

<u>Saferstein, R. and T. Roy.</u> 2021. <u>Criminalistics: an introduction to forensic science. Pearson</u> Publishing.

CK-12 College Human Biology (<a href="https://www.ck12.org/book/ck-12-human-biology/">https://www.ck12.org/book/ck-12-human-biology/</a>)

Lecture Outlines: PowerPoint outlines for course lectures are available on the course website.

Laulima: Your instructor has created a laulima website to accompany this course. This website contains links to lecture outlines, lab activities, and review materials. All students enrolled in the class are automatically granted access to the course website. You will need a UH email account to access the Laulima site.

Adobe Reader: You will need to download a recent copy of Adobe Reader to view the lecture files. A copy is available at: http://get.adobe.com/reader/

#### Course Format

IS 130 is a combined lecture/lab class. Students who complete the class will receive both Biological Sciences credit (DB) as well as credit for taking a natural sciences lab (DY). The lecture portion of the class meets MW: 11:30-12:45 in Imiloa 133. The lab meets from 1:00-2:20 PM on Mondays.

### Laulima Learning Management System

- Laulima (Sakai) Accessibility
- Laulima will be unavailable daily from 3:00 am-4:00 am HST for server backup and maintenance.
- Laulima automatically logs you out *if it does not detect activity for two hours*. A warning message will appear, notifying you of the lack of activity. Activity is defined as clicking a button in Laulima, such as "Save Draft" or "Next" (in a test), clicking on a course tab, or taking an action that sends information to the server.

### Other Technology

Review the privacy/security policies before using the technologies we will be using in this class. Contact me if you would like to discuss the use of alternate options or technologies.

- <u>Google Sheets</u> is used to create assignment and reference worksheets (<u>accessibility</u> <u>statement</u>, <u>privacy policy</u>)
- Google Docs is used to create the Course Design Document and rubrics (accessibility statement, privacy policy)
- <u>Padlet</u> is used for some of the discussion activities (<u>Padlet Accessibility Statement</u>, <u>Padlet privacy policy</u>)
- YouTube is used for delivering some of the course content (accessibility statement, privacy policy)
- <u>Zoom</u> is used for the Synchronous Sessions and virtual office (<u>accessibility statement</u>, <u>privacy policy</u>)

## **Participation Verification**

Campuses are required by federal regulations to verify the participation of students in their classes. In accordance with <u>Executive Policy 7.209</u>, all students in the University of Hawai'i system are required to establish "participation" to ensure that they are not dropped from their class(es). Students who fail to participate by the late registration period for a class will be administratively dropped from that class. Students may also be dropped from dependent prerequisite and/or corequisite classes if both courses do not establish participation.

# **Grading Policy**

The assignment of points will be according to the following:

TOTAL	850 points
Crime Scene Activities	200 points
Lab Participation	130 points
Lecture Exams	200 points
Quizzes	120 points
Lecture Class Participation	150 points
Instructor Meetings	50 points

### **GRADING SCALE**

Percentage Points	Grade
90-100	Α
80-89	В
70-79	С
60-69	D
0-59	F

Please note that "N" grades are not given for this course.

Grades may be curved at the instructor's discretion; however, the student should use the above grading scale to evaluate their performance throughout the class. If you miss an examination because of an illness or legitimate emergency, you must contact the instructor within 48 hours to arrange a time to take a make-up exam. The instructor will request that the student present evidence of the illness or emergency that caused the student to miss the exam. If the student misses an exam for any other reason, the student may be prohibited from taking a make-up exam, thus failing to receive any points for the missed exam. While make-up exams will cover the same content area as a missed exam, the exam format and specific questions may be different.

No retests will be given for any reason.

### **Assessment Tasks and Grading**

Mandatory Meeting with Instructor (2 x 25 points). All students are required to meet with the instructor twice during the semester. The first meeting (to be scheduled in the first 2 weeks) is a student interview where we talk story and learn about your goals. The second meeting (scheduled within 2 weeks of exam 1) is a check-in so that we can evaluate your progress in the class and make changes if needed. Sign up for a meeting time using Star Balance.

Class participation ( $30 \times 5$  points). To earn full points, students must attend each class session having done the assigned reading and completed any in-class assignments. Students are allowed two absences without penalty. After that, five points will be deducted for each day the student is absent or is more than ten minutes late.

**Weekly Quizzes** (12 x 10 points). Students will complete at least 14 quizzes to assess their comprehension of course material. Only the top 12 quiz scores will factor into the student's grade.

**Lecture Exams** ( $2 \times 100$  points). Students will complete a mid-term and final exam on material covered in the lecture portion of the class.

**Lab Participation** ( $13 \times 10$  points). Students will attend weekly crime-scene-themed labs. Participation will be assessed by in-class quizzes and other activities. Keep in mind that students who miss a lab will not be able to submit a crime scene report for the missed days.

**Crime Scene Lab Reports** (200 points). Students will complete four lab reports based on fictitious crime scenes. To complete the reports, the students must form a hypothesis, analyze the evidence, and form conclusions about the identity of the victim and/or perpetrators and the modus operandi using their analysis.

# **Academic Integrity**

Work submitted by a student must be the student's own work. The work of others should be explicitly marked, such as through the use of quotes or summarizing with reference to the original author.

In this class, students who commit academic dishonesty, cheating, or plagiarism will have the following consequence(s):

Students will receive a failing grade for plagiarized assignments.

All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs.

Windward CC Student Conduct Information

**UH System Student Conduct Policy EO 7.208** 

# Student Responsibilities

You are expected to attend lectures, participate in all course activities, and complete all examinations and course assignments on time. Please be considerate of other students by turning off any cell phones or beepers during class. Any changes in the course schedule, such as examination dates, deadlines, etc., will be announced ahead of time. It is your responsibility to be informed of these changes. It is also your responsibility to be informed about deadlines critical to making registration changes (e.g., last day for making an official withdrawal).

### How to succeed in this class

Although you will be given lecture outlines, you will not succeed in this class without attending the lecture and taking detailed notes on the corresponding material in the textbook. Merely reading the chapter will not suffice. Science courses at WCC generally require a minimum of two to three hours of independent study time for each hour in class. It is your responsibility to allocate the appropriate amount of time needed for study and be realistic about all personal and professional commitments that may infringe on your study time.

#### Classroom Decorum

As your instructor, I try very hard to create an atmosphere of mutual respect. This is a college class where students are welcome and encouraged to participate in class discussions and ask questions during the lecture. My only requirements are 1) that you are respectful in your interactions with me and your fellow students and 2) that you refrain from disruptive behavior. This includes making loud noises, talking on your cell phone (if you need to take a call, please do so in the hallway), or talking while I am speaking. If you are disruptive or disrespectful, I will give you a polite warning. If you continue to do so I will ask you to leave the class for the day. If you believe I am being disrespectful to you or anyone else in the class, please let me know!

As a reminder, smoking, vaping, and consuming drugs or alcohol are not allowed on the WCC campus. Harassment or violence of any kind is also prohibited (see below). Students who engage

in these activities will be asked to leave immediately and referred to the Vice Chancellor of Student Services.

If you have questions about your grades or academic progress, please see me outside of the class (e.g., during office hours or contact me by email). I cannot discuss your grades during class time or in a situation that is not private, as this violates FERPA rules.

# How to Seek Academic or Technical Support

### **Academic Support**

- Windward Community College Library
- <u>Library eResources</u>
- Ka Piko Writing Lab
- <u>Ka Piko Speech Lab</u>
- Ka Piko Math Lab
- Evening and Online Learning at Windward Community College
- STAR Balance

## **Technical Support**

- <u>UH ITS Help Desk</u> email <u>help@hawaii.edu</u> or call 956-8883 (or 1-800-558-2669) for Laulima and most technology support. Available 24 hours a day, 7 days a week, including holidays.
- Student Tech Support email <u>winhelp@hawaii.edu</u>, call 808-235-7437, or stop by in person at Hale La'akea 228. Available Monday-Friday from 8:00 am-4:00 pm.
- Laulima Click on the <u>Request Assistance</u> link at the bottom of any Laulima Page to fill out and submit a question and get your answer via email.
- Information Security for Students

# College Policies & Support Services

### **Disabilities Accommodations Statement**

The Windward Community College's Disability Student Services Office (WCC-DSSO) is committed to providing equal access to qualified students with disabilities.

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to participate fully in this class, you are encouraged to contact the Disability Specialist Counselor, Roy Inouye, to discuss reasonable accommodations that will help you succeed in this class. The Disabilities Counselor can be reached at 808-235-7448, <a href="wccdsso@hawaii.edu">wccdsso@hawaii.edu</a>, or stop by the office (Hale Kakoʻo 106) for more information.

### **Basic Needs**

Basic needs include food and housing, childcare, mental health, financial resources, and transportation. Student basic needs security is critical for ensuring strong academic performance, persistence and graduation, and overall student well-being. If you or someone you know is experiencing basic needs insecurity, please see the <u>UH System Basic Needs website</u>.

### **Mental Health Counseling**

Mental Health and Wellness at Windward Community College counseling services and activities on campus to support students' life goals as well as their academic goals. Information about services can be found at the <u>WCC Mental Health & Wellness website</u>.

### **UH Alerts**

The UH Alert emergency notification system alerts the university community in the event of a natural, health or civil emergency. The information you provide will only be used in the event of an emergency that impacts the health and safety of the UH community or the closure of whole campuses. It will not be shared with others or used for routine UH communications or announcements. To sign up, visit <u>UH Alerts website</u> for more information.

### **Financial Aid**

If you are receiving financial aid and are contemplating not completing the course, BEFORE you withdraw, it is highly recommended that you contact the Financial Aid Office at 808-934-2712 or email them at <a href="wccfao@hawaii.edu">wccfao@hawaii.edu</a> to discuss the impact this decision may have on your financial aid eligibility.

### **Student Conduct Code**

Windward Community College follows the University of Hawai'i Code of Student Conduct which defines expected conduct for students and specifies those acts subject to University sanctions. Students should familiarize themselves with the Code of Student Conduct since, upon enrollment at Windward Community College, the student has placed herself/himself under the policies and regulations of the University and its duly constituted bodies. The disciplinary authority is exercised through the Office of the Vice Chancellor for Student Affairs. Copies of the Student Conduct Code are available at the Office of the Vice Chancellor for Student Affairs or online.

### Title IX - Sex Discrimination And Gender-Based Violence Resources

Windward Community College is committed to providing a learning, working, and living environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking.

If you or someone you know is experiencing any of these, WCC has staff and resources to support and assist you. To report an incident of sex discrimination or gender-based violence, as well as receive information and support, please contact one of the following:

Leslie Cabingabang, UH System Confidential Advocate

Phone/Text: (808) 348-0432 or (808) 341-4952

Email: advocate@hawaii.edu

Office: Hale Kākoʻo 107 (Wednesdays)

Mykie E. Menor Ozoa-Aglugub, J.D., Title IX Coordinator

Phone: (808) 235-7468 Email: mozoa@hawaii.edu Office: Hale Kākoʻo 109

Desrae Kahale, Mental Health Counselor & Confidential Resource

Phone: (808) 235-7393 Email: dkahale3@hawaii.edu Office: Hale Kākoʻo 101

Karen Cho, Deputy Title IX Coordinator

Phone: (808) 235-7404 Email: kcho@hawaii.edu Office: Hale 'Alaka'i 120

As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator. Although the Title IX Coordinator and I cannot guarantee confidentiality, you will still have options about how your case will be handled. My goal is to make sure you are aware of the range of options available to you and have access to the resources and support you need.

For more information regarding sex discrimination and gender-based violence, the University's Title IX resources, and the University's Policy, Interim EP 1.204, go to <a href="mailto:manoa.hawaii.edu/titleix/">manoa.hawaii.edu/titleix/</a>

# IS 130: CSI Hawaii Lecture Schedule MW 11:30-12:45 Imiloa 133

Reading Reading Focus Quiz Du								
Week	Date	Day	Lecture Topic	S&R	CK-12	Phys/Biol	Quiz Due 11 PM Fri	
			Syllabus/Science as a way of			i ilyonbioi		
	8/26	М	knowing		1.1-1.8			
1	8/28		Intro to Forensics	CH 1			Quiz 1	
	9/2		Holiday: Labor Day					
			Physical Evidence/ Intro to					
2	9/4	W	Crime Scene	CH 3		PS	Quiz 2	
			Levels of Biological					
	9/9	М	Organization		CH 2	BS		
3	9/11	W	Integument: Skin and Hair		CH 12	BS	Quiz 3	
	9/16	М	Fingerprints	CH 6		BS		
4	9/18	W	The Microscope	CH 8			Quiz 4	
	9/23	М	Hair and Fibers	CH 11		PS		
5	9/25	W	Firearms	CH 9		PS	Quiz 5	
	9/30	М	Ballistics & GSR	CH 9		PS		
6	10/2	W	Matter, Light, and Glass Exam	CH 10		PS	Quiz 6	
	10/7	М	Drugs & Forensic Toxicology	CH 12-13		BS		
7	10/9	W	TBA				Quiz 7	
	10/14	М	Midterm Review					
8	10/16	W	Exam 1					
	10/21	М	Skeletal System		CH 13	BS		
9	10/23	W	Forensic Osteology		CH 13		Quiz 8	
	10/28	М	Cardiovascular System/Blood		CH 16	BS		
10	10/30	W	Serology	CH 15		BS	Quiz 9	
	11/4	М	Blood Spatter Analysis	CH 4		PS		
			Fluorescence of Biological					
11	11/6	W	Fluids			PS	Quiz 10	
	11/11		Metals, Paints, and Soil	CH 14		PS		
12	11/13	W	Holiday: Veteran's Day				Quiz 11	
	11/18		The Cell		CH 4	BS		
13	11/20	W	Genetics		CH 5	BS	Quiz 12	
			DNA: the Indispensable					
	11/25		Forensic Tool	CH 16		BS	]	
14	11/27		DNA Technology	CH 16		BS	Quiz 13	
	12/2		Fire and Explosions	CH 17		PS	]	
15			Forensic Entomology	TBA		BS	Quiz 14	
	12/9		TBA				]	
16	12/11	W	Final Exam Review					

• The schedule <u>is subject to change</u>. Any changes will be announced in class and on the course website.

# IS 130: CSI Hawaii Lab Schedule M 1:00-2:20 PM, Imiloa 133

Week	Date	Day	Lab Topic	Reading
		<u> </u>	Activity 1: Where is the shooter?	
1	8/26	М	Student Interviews	N/A
2	9/2	м	Holiday Labor Day	NA
3	9/9	M	Activity 2: Crime Scene Documentation	CH 2-3
4	9/16	M	Activity 3: Latent Print Lab I	CH 6
			Activity 4: Latent Print Lab 2: Fuming & Advanced	
5	9/23	М	Techniques	CH 6
6	9/30	М	Activity 5: Microscopy/Hair and Fibers	CH 8, 11
7	10/7	М	Activity 6: Firearms & Ballistics Lab I	CH 9
8	10/14	М	Activity 7: Firearms and Ballistics Lab 2	CH 9
9	10/21	М	Comprehensive Crime Scene #1	
10	10/28	M	Activity 8: Osteology Lab	
11	11/4	M	Activity 9: Blood Lab: Blood Spatter, Serology, and Presumptive Blood Tests	CH 4, 15
12	11/11	М	Holiday: Veteran's Day	
13	11/18	M	Activity 10: Fluorescence and Chemistry Lab	CH 10
14	11/25	М	Activity 11: DNA Evidence Lab	
15	12/2	М	Activity 12: DNA Evidence Lab II	
16	12/9	М	Comprehensive Crime Scene #2	

• The schedule is <u>subject to change</u>. Any changes will be announced in class and on the course website.